

TIP Projects R-2530B, B-4974 and R-2527
NC 24 – 27 Widening, Stanly and Montgomery Counties
B-4974 Concurrence Points 3 and 4A REVISIT Meeting
Least Environmentally Damaging Practicable Alternative (LEDPA),
Avoidance & Minimization of Jurisdictional Impacts and Agency Comment Resolution
August 17, 2016

Updated Information is highlighted in Yellow

Meeting Purpose

The purpose of today's meeting is to revisit the selection of the Least Environmentally Damaging Practicable Alternative (LEDPA), Concurrence Point 3, and Avoidance and Minimization, Concurrence Point 4A, for B-4974 since the Land Trust for Central North Carolina withdrew their offer to take over ownership of the National Register-Eligible Bridge No. 51 over the Pee Dee River due to the additional financial burden specified by state legislation. An Environmental Assessment for these projects was approved on December 23, 2011 and distributed.

TIP Description

The North Carolina Department of Transportation (NCDOT) Draft State Transportation Improvement Program (STIP) includes a highway project in Stanly County (TIP Project R-2530B) from NC 740 in Albemarle to the west end of the Pee Dee River Bridge, the Pee Dee River Bridge replacement project in Stanly County (TIP Project B-4974), and a highway project in Montgomery County (TIP Project R-2527) from the east end of the Pee Dee River Bridge to the proposed Troy Bypass (TIP Project R-623) west of the city of Troy. All three projects are being studied under one NEPA study. A multi-lane facility is proposed in the STIP; therefore, a four-lane median divided facility with a 23-foot raised median from NC 740 to SR 1731 (Sweet Home Church Road) and a 46-foot depressed median from SR 1731 to the proposed Troy Bypass will be studied for these projects. The proposed projects are approximately 14.6 miles long depending on the alternative chosen. It is anticipated that 150 – 200 feet of right of way will be required to accommodate the proposed improvements. Partial control of access will be obtained. All intersecting roadways will cross the highway at-grade; no grade separations or interchanges are proposed. See Figure 1 for the Vicinity Map.

Purpose of and Need for the Projects

The purpose of these projects is to improve traffic flow and level of service (LOS) on the section of NC 24-27 through the project study areas and to maintain a bridge across the Pee Dee River that addresses the needs of highway users.

The needs to be addressed by these projects include:

- Transportation deficiencies exist along NC 24-27 in the project study areas which are projected to increase substantially by the year 2035.
- Bridge No. 51 over the Pee Dee River is considered structurally deficient and is eligible for the Federal-Aid Highway Bridge Program.
- Maintain and improve the mobility and connectivity functions of the NC 24-27 corridor as part of the Strategic Highway Corridor Vision and the North Carolina Intrastate System.

Project Status

- The CP1 and CP2 meeting was held on August 12, 2008, and concurrence was reached.
- The CP2 meeting was continued on December 11, 2008, and concurrence was reached.
- Public Involvement Occurrences and dates:
 - Citizens Informational Workshops for R-2530B and R-2527 were held in 2004. A Citizens Informational Workshop for all 3 projects was held on November 18, 2010.
- The CP2A meeting was held on February 2, 2011.
- The Environmental Assessment was signed on December 23, 2011.

- A Design Public Hearing was held on June 21, 2012.
- The CP3 meeting was held on January 22, 2014.
- The CP4A meeting was held on June 18, 2014.
- The CP3 and CP4A REVISIT meeting is scheduled for August 17, 2016.
- Finding of No Significant Impact (FONSI) - FY 2017
- Right of Way acquisition - R-2530B & B-4974: FY 2017 and R-2527 is Unfunded
- Construction - R-2530B & B-4974: FY 2019 and R-2527 is Unfunded

Alternatives Summary

View the Design Public Hearing Maps at the following links:

http://ncdot.gov/download/projects/publichearings/r2530b_phm_1.pdf
http://ncdot.gov/download/projects/publichearings/B4974_phm_2.pdf
http://ncdot.gov/download/projects/publichearings/R2527_phm_3.pdf
http://ncdot.gov/download/projects/publichearings/R2527_phm_4.pdf
http://ncdot.gov/download/projects/publichearings/R2527_phm_5.pdf

The “Best Fit” alignment alternative was analyzed in the Environmental Assessment (EA) for projects R-2530B and R-2527. This alternative widens NC 24-27 at locations that “best fit” the current road location and surrounding land uses. “Best fit” locations were evaluated and selected to improve the existing road alignment, minimize impacts, and permit maintenance of traffic during construction. Two alternatives were analyzed in the EA for project B-4974. **See Figure 2.** Alternative 1 consists of replacing Bridge No. 51 with a new bridge south of the existing bridges, and Alternative 4 consists of removing the National Register-Eligible Bridge No. 51 and replacing it with a new bridge along the existing roadway alignment.

On November 21, 2013, the Land Trust for Central North Carolina offered to take ownership of Bridge No. 51 once NC 24-27 is widened and a replacement bridge is constructed. **On August 18, 2014, the Land Trust for Central North Carolina withdrew their offer due to the additional financial burden specified by state legislation.**

A Bridge No. 51 Rehabilitation Alternative has been developed for consideration since both B-4974, Alternatives 1 and 4 will require removal of Bridge No. 51. This alternative will keep part of the existing National Register-Eligible Bridge No. 51 intact, replace and widen the bridge deck, and rehabilitate the arch ribs and arch piers while preserving the historic and architectural character of the original structure.

Table 1 below shows estimated project costs for the project alternatives:

TABLE 1: PROJECT COST ESTIMATES

Project Number	Right of Way Cost	Construction Cost	Project Cost
R-2530B:			
Tie to Alternative 1	\$10,620,830	\$29,400,000	\$40,020,830
Tie to Alternative 4	\$9,482,460	\$29,000,000	\$38,482,460
Tie to Bridge No. 51 Rehabilitation Alternative	\$9,482,460	\$29,000,000	\$38,482,460
B-4974:			
Alternative 1	\$1,665,000	\$29,500,000	\$31,165,000
Alternative 4	\$1,588,150	\$26,500,000	\$28,088,150
Bridge No. 51 Rehabilitation Alternative	\$1,588,150	\$26,100,000	\$27,688,150
R-2527	\$3,089,790	\$39,400,000	\$42,489,790

Table 2 below shows a summary of the environmental effects of the project alternatives. The Bridge No. 51 Rehabilitation Alternative will have the same environmental effects as B-4974, Alternative 4 except there is “no adverse effect” to Bridge No. 51 with specific conditions. See Attachment 1 for updated wetland and stream impacts tables and a new pond impacts table. Table 2 and the tables in Attachment 1 were revised to reflect changes made after the 2013 Jurisdictional Determination field visit.

TABLE 2: SUMMARY OF ENVIRONMENTAL EFFECTS

IMPACT CATEGORY	PROJECT STUDY ALTERNATIVE				TOTAL IMPACTS	
	A	B-1	B-4	C		
	R-2530B	B-4974,	B-4974,	R-2527	A+B1+C	A+B4+C
		Alt. 1	Alt. 4			
Natural Resources Impacts						
Federal Listed Species Habitat	Yes	Yes	Yes	Yes	Yes	Yes
100-Year Flood Plain and Floodway Impacts	No	Yes	Yes	Yes	Yes	Yes
Wetlands (number of crossings/acres)	3 / 0.58	2 / 0.08	1 / 0.02	21 / 0.88	26 / 1.54	25 /1.48
Stream Crossings (number / linear feet)	14 / 4,347	7 / 1,478	7 / 1,575	26 / 5,881	47 / 11,706	47 / 11,803
Water Supply Critical Areas	Yes	Yes	Yes	Yes	Yes	Yes
Rare Plants *	Yes	No	No	Yes	Yes	Yes
USFS Forest Land (acres) **	0	0	0	50	50	50
Human Environment Impacts						
Residential Relocations (number)	19	6	5	8	33	32
Business Relocations (number)	18	7	3	2	27	23
Low Income/Minority Population	No	No	No	No	No	No
Cemeteries/Graves (number of graves impacted)	Yes / 0	No	No	No	Yes / 0	Yes / 0
Historic Structures ***	0	1	1	0	1	1
Archaeological Sites	3	0	0	3	6	6
Section 4(f) Impacts	No	Yes	Yes	No	Yes	Yes
Traffic Noise Impacts (receptors) /Noise Sensitive Areas	19	2	2	9	30	30
Air Quality	Within an Attainment area					
Physical Environment Impacts						
Railroad Crossings (number)	0	0	0	1	1	1
Farmland	No	No	No	No	No	No
Potentially Hazardous Materials Sites (number)	17	2	2	4	23	23

NOTES:

- All impacts, but the USFS Forest Land acreage, are based on preliminary design slope stake limits plus 25 feet. The USFS Forest Land acreage is based on preliminary proposed right of way limits.
- * Rare plants include Schweinitz’s Sunflower, Georgia Aster, Large Witch Alder and Smooth Sunflower.
- ** USFS Forest Land acreage was recalculated based on updated forest boundaries.
- *** The Swift Island Ferry / James B. Garrison Bridge (Existing Bridge 51) is eligible for the National Register of Historic Places.

The design and bridge replacement alternatives are described below:

- R-2530B, Section 1 – NC 740 to SR 1731 – “Best Fit”
-Asymmetrical Widening to the South – 23’ Raised Median
* **Concurrence reached on 1/22/14, revisit not required**
- R-2530B, Section 2 – SR 1731 to SR 1720 - “Best Fit”
-Asymmetrical Widening to the North – 46’ Median
* **Concurrence reached on 1/22/14, revisit not required**
- R-2530B, Section 3 – SR 1720 to SR 1818 - “Best Fit”
-Asymmetrical Widening to the South – 46’ Median
* **Concurrence reached on 1/22/14, revisit not required**
- R-2530B, Section 4 – SR 1818 to west of SR 1778 - “Best Fit”
-Asymmetrical Widening to the South (Tie to B-4974, Alternative 1) – 46’ Median or
-Asymmetrical Widening to the North (Tie to B-4974, Alternative 4) – 46’ Median or
-Asymmetrical Widening to the North (Tie to B-4974, Bridge No. 51 Rehabilitation Alternative) – 46’ Median
- B-4974, Section 5 – west of SR 1778 to east of NC 73
-Alternative 1 - South side widening, replace Bridge No. 51 or
-Alternative 4 - Replace in place, replace Bridge No. 51 or
-Bridge No. 51 Rehabilitation Alternative, rehabilitate Bridge No. 51
- R-2527, Section 6 – east of NC 73 to SR 1134 - “Best Fit”
-Asymmetrical Widening to the North – 46’ Median
* **Concurrence reached on 1/22/14, revisit not required**
- R-2527, Section 7 – SR 1134 to SR 1550 - “Best Fit”
-Asymmetrical Widening to the North – 46’ Median
* **Concurrence reached on 1/22/14, revisit not required**

Avoidance and Minimization Measures utilized during preliminary design for R-2530B and R-2527; none were developed for B-4974:

- * **Concurrence reached on 6/18/14 for the items listed below, revisit not required**
- 2:1 slopes were used at culvert crossings and wetland areas,
- On project R-2530B between SR 1739 (McNeil Road) and SR 1818 (Stony Mountain Road), the grade from Sta. 213+00 to Sta. 235+00 was adjusted to avoid the need to realign the road, thus minimizing impacts to homes, wetlands and streams in this area.
- On R-2527, SR 1150 (River Road) was not realigned to meet at a common point on NC 24-27 to minimize impacts to an adjacent stream crossing and development in the area.

Wildlife Resources Commission (WRC) Boat Ramp Access Parking Area Alternatives

- For the WRC parking area impact minimization alternative, see Figure 3.

Concurrence on the LEDPA and on Avoidance & Minimization / Signing Forms

Summary & Adjournment: The next Merger 01 Team Meeting for this project will be Concurrence Point 4B, 30% Hydraulic Design Review.